

CCR Number: 0016

CRITICALITY: ROUTINE

DUE: 07/14/98

DISTRIBUTION SHEET
EO-1 LEVEL II CCB

Matt Jurotich/EO-1 Payload Manager

Pete Spidaliere/EO-1 Mission Mgr

Nick Speciale/EO-1 Mission Technologist

M. Perry/SYS Engineer/Swales

Mike Cully/S/C Mgr./GSFC

Terry Smith/Warp Lead Engineer

Mike Kelley/Flight Assurance/GSFC

Brian Smith/S/C Engineer/GSFC

Dale Schulz/EO-1 Project Manager

John Lyons/GSFC/LFSA


George Andrew/EO-1 Sys Avionics


Bill Hayden/GSFC MAMS IPDT

Bernard Carpenter/LMSC

Kamal Thakore/EO-1 LFSA Eng.

NEW MILLENNIUM PROJECT CONFIGURATION CHANGE REQUEST

PROGRAM <u>EO-1</u>		TITLE <u>CHANGES TO EO-1 LFSA ICD-20</u>	
CCR NO. <u>0016</u>		ORIGINATOR <u>J. Lyons/GSFC</u>	
DATE INITIATED <u>07/14/98</u>		ORIGINATOR'S CHG. NO. _____	
		SPONSOR/CODE <u>J. Lyons/EO-1 LFSA</u> PHONE <u>x3841</u>	
EFFECTIVITY		CHANGE CLASS	
ITEM: <u>LFSA</u>		I II	
S / N _____		PRELIMINARY <input type="checkbox"/> <input type="checkbox"/>	
ITEM: _____		FORMAL <input type="checkbox"/> <input type="checkbox"/>	
S / N _____		TYPE OF CHANGE	
ITEM: _____		MILESTONE <input type="checkbox"/> INTERFACE <input checked="" type="checkbox"/> SOFTWARE <input type="checkbox"/>	
S / N _____		DOCUMENT <input checked="" type="checkbox"/> POWER <input type="checkbox"/> OTHER <input type="checkbox"/>	
		COST _____ WEIGHT <input type="checkbox"/> _____ <input type="checkbox"/>	
		DOCUMENTS OR SOFTWARE AFFECTED	
		EO-1 ICD-020	
PROBLEM			
<p>The attached Preliminary Interface Revision Notice (PIRN) to EO-1 ICD-020, NMP EO-1 Lightweight, Flexible Solar Array (LFSA) Interface Control Document (ICD) provides for changes to the Interface document. This PIRN includes suggested changes that will be incorporated as an Interface revision and will be officially documented as such. The PIRN will become an official Interface change once the EO-1 project Configuration Control Board (CCB) chairman signs this CCR and the attached PIRN.</p>			
PROPOSED SOLUTION			
<p>Approve the attached PIRN 001 to EO-1 ICD-0020 by the EO-1 Level II Configuration Control Board (CCB). The signed off PIRN will serve as the official approval of changes to this ICD. Future changes will be initiated by submittal of Configuration Change Requests (CCRs) and Preliminary Interface Revision Notices (PIRNs) for CCB approval. This document is maintained by the EO-1 Configuration Management Office (CMO).</p>			
BOARD ACTION	APPROVAL LEVEL REQUIRED	CRITICALITY LEVEL	PROCUREMENT CHANGE ORDER CLASSIFICATION
APPROVE <input checked="" type="checkbox"/>	LEVEL I HQS <input type="checkbox"/>	EMERGENCY <input type="checkbox"/>	ROUTINE URGENT EMERGENCY <input type="checkbox"/>
APPROVE WITH CHANGE <input type="checkbox"/>	LEVEL II GSFC <input checked="" type="checkbox"/>	URGENT <input type="checkbox"/>	OPTION 1 <input type="checkbox"/> OPTION 1 <input type="checkbox"/>
DISAPPROVE <input type="checkbox"/>	LEVEL III <input type="checkbox"/>	ROUTINE <input checked="" type="checkbox"/>	OPTION 2 <input type="checkbox"/> OPTION 2 <input type="checkbox"/>
WITHDRAW <input type="checkbox"/>			
COMMENTS			
<p style="text-align: center;">CHAIRPERSON  DATE <u>28 JUL 98</u></p>			

GODDARD SPACE FLIGHT CENTER		1. PAGE 1 OF 2																									
PRELIMINARY SPECIFICATION CHANGE NOTICE (PSCN) No. _____		2. INIT. DATE: 7/14/98																									
or		3. CONTRACT NUMBER																									
PRELIMINARY INTERFACE REVISION NOTICE (PIRN) No. 001		6. DOCUMENT NUMBER: REVISION:																									
4. ASSOCIATED CONTROL NUMBERS: EO-1CCR 0016	5. CI'S AFFECTED: LFSA ICD-20																										
7. DESCRIPTION OF CHANGE:																											
<p>1. <u>Delete</u>: Figure 1.2 Tri-Axial Accelerometer Box Diagram.</p> <p>2. <u>Delete</u>: The following from Section 1.2.2: <u>EXPEWRIMENT REQUIREMENTS</u>:</p> <p>" . . . and during orbital operations with LMA integrated accelerometer and ACS gyro output data."</p> <p>3. <u>Delete</u>: entire Section 1.4.2 <u>JITTER EVALUATION</u></p> <p>4. <u>Delete</u>: Reference to Accelerometer in Figure 2.1: Interface Box.</p> <p>5. <u>Delete</u>: No 5. Accelerometers in Section 2.1 <u>ELECTRICAL INTERFACE DEFINITIONS</u></p> <p>6. <u>Delete</u>: Spacecraft Slew, Accel #1, Accel #2, Accel # 3, 3,5 in Section 2.2 <u>TIMING DIAGRAMS FOR DATA EVENTS</u>.</p> <p>7. <u>Delete</u>: the following section in Section 2.2 <u>TIMING DIAGRAMS FOR DATA EVENTS</u>:</p> <p>VIBRATION DATA COLLECTION-The dynamic properties of the LFSA will be determined using signal axis accelerometers mounted on the flexible CIS blanket. These are mounted to sense the first and second panel modes. A three axis accelerometer will be mounted on the spacecraft to establish the relative motion of the LFSA. Data from each of the five accelerometer channels is collected simultaneously at the rate of 100 Hz. Spacecraft slewing will be used to induce a disturbance into the LFSA. The period of data collection over the slewing will be determined by analysis and ground testing. It is not necessary to acquire acceleration data simultaneously with PV data.</p> <p>8. <u>Delete</u>: The following from LFSA/EO-1 Command and Telemetry Connector Pin Assignments</p> <table border="0" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Pin #</th> <th style="text-align: left;">Gauge</th> <th style="text-align: left;">I/O</th> <th style="text-align: left;">Name</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>20</td> <td>I</td> <td>Accel 1 and Accel 2 Power</td> </tr> <tr> <td>2</td> <td>24</td> <td>Shield</td> <td>Accel 1 and Accel 2 Shield</td> </tr> <tr> <td>3</td> <td>24</td> <td>O</td> <td>Accel 1 Output</td> </tr> <tr> <td>4</td> <td>24</td> <td>O</td> <td>Accel 1 and Accel 2 Return</td> </tr> <tr> <td>15</td> <td>24</td> <td>O</td> <td>Accel 2 Output</td> </tr> </tbody> </table>				Pin #	Gauge	I/O	Name	1	20	I	Accel 1 and Accel 2 Power	2	24	Shield	Accel 1 and Accel 2 Shield	3	24	O	Accel 1 Output	4	24	O	Accel 1 and Accel 2 Return	15	24	O	Accel 2 Output
Pin #	Gauge	I/O	Name																								
1	20	I	Accel 1 and Accel 2 Power																								
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15	24	O	Accel 2 Output																								
PREPARED BY: S.Schneider/EO-1 CM		ORIGINATING:	ORGANIZATION: DATE:																								
HST CCB ACTION		SIGNATURE: 	DATE: 28 JUL 98																								
APPROVED: <input checked="" type="checkbox"/> DISAPPROVED:																											

CONTINUATION SHEET

Page 2 of 2PIRN001 EO-1 CCR 0016 DATE 7/14/98 EO-1 LFSA ICD-020

9. Delete: The following from LFSA/EO-1 Spacecraft Interface Connector Pin Assignments:

Pin#	Gauge	I/O	Name	Voltage
7	24	O	Accel 1	+/- 10VDC
8	24	O	Accel 1	+/- 10VDC
9	24	O	Accel 1 Return	RTN
10	24	O	Accel 2 Return	RTN

10. Delete: LFSA Tri-Axial Accelerometer Connector Pin Assignment

Pin #	Guage	I/O	Name
1	20	I	Accel 1, 2 and 3 Power
2	24	Shield	Accel 1, 2, and 3 Shield
3	24	I	Accel 1, 2, and 3 Power Return
4	24	O	Accel 1 Signal Output
5	24	O	Accel 1 Signal Return
6	24	O	Accel 2 Signal Output
7	24	O	Accel 2 Signal Return
8	24	O	Accel 3 Signal Output
9	24	O	Accel 3 Signal Return
10	Spare	Spare	Spare
11	Spare	Spare	Spare
12	Spare	Spare	Spare
13	Spare	Spare	Spare
14	Spare	Spare	Spare
15	Spare	Spare	Spare

11 Delete the following from Deliverables in Section 3.0:

Accelerometers	LM	Swales	1 May 98
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Date: Wed, 22 Jul 1998 16:14:49 -0400 (Eastern Daylight Time)
From: Administrator@hst-nic.hst.nasa.gov
Reply-to: (Mark Perry)
Subject: CCR:0016 - DUE: 06/22/98 ROUTINE
Level-2
Mark Perr WWW-COMMENTS

USER : (Mark Perry) sent the following comments on :

Date: 22 July 1998
CCR Number: 0016
Sponsor: J. Lyons/EO-1 LFSA
Due Date: 06/22/98

CCR Title: CHANGES TO EO-1 LFSA ICD-20

Remote host: 209.49.96.12 Email Address:

APPROVAL STATUS: APPROVED

Note:

COMMENTS:

Date: Thu, 17 Sep 1998 13:02:51 -0400 (Eastern Daylight Time)
From: Administrator@hst-nic.hst.nasa.gov
Reply-to: (Nicholas Speciale)
Subject: CCR:0016 - DUE: 06/22/98 ROUTINE Level-2 Nicholas Special WWW-COMMENTS

USER : (Nicholas Speciale) sent the following comments on :

Date: 9/18/98
CCR Number: 0016
Sponsor: J. Lyons/EO-1 LFSA
Due Date: 06/22/98

CCR Title: CHANGES TO EO-1 LFSA ICD-20

Remote host: 128.183.212.178 Email Address: speciale@pop500.gsfc.nasa.gov

APPROVAL STATUS: APPROVED
Note:

COMMENTS: